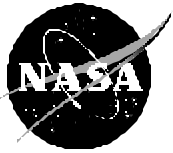


STS-105 Flight Readiness Review

**Space Station and Payload Processing
ISS-11-7A.1/STS-105**

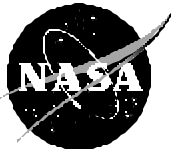
**Multi-Purpose Logistics Module “Leonardo”
ICC/EAS/MISSE
HEAT/GAS-774/780/SEM-10**

**Glenn Chin/UB-1
7A.1 Mission Manager
August 1, 2001**



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- **Processing Overview**
 - Processing Milestones
 - Orbiter Middeck Requirements
- **Engineering Status**
- **Readiness Statement**
- **Backup Charts**
 - Acronyms



PROCESSING MILESTONES

SSPF

| | |
|--|----------------|
| MPLM/Leonardo Available to 7A.1 | 06 Apr '01(A) |
| MPLM Pre-Rack Installation Checkout | 01 May '01(A) |
| Cargo Bench Review #1 | 15 May '01(A) |
| MPLM Rack Installation | 25 May '01(A) |
| Cargo Bench Review #2 | 05 Jun '01(A) |
| MPLM Aft Access Closure Installation/Leak Test | 11 Jun '01(A) |
| MPLM CBM Leak Test | 20 Jun '01(A) |
| ICC Arrival SSPF | 22 Jun '01(A) |
| EAS NH3 Fill | 03 Jul '01(A) |
| MPLM Final Stowage Opportunity | 09 Jul '01 (A) |
| MPLM Hatch Closure for Flight/Leak Test | 11 Jul '01 (A) |
| MPLM Dry Air Purge | 12 Jul '01 (A) |
| MPLM Wt. & C.G./Transfer to Canister | 18 Jul '01 (A) |
| ICC Transfer to Canister | 23 Jul '01 (A) |



PROCESSING MILESTONES

OPF-2

| | |
|--|---------------|
| HEAT/SEM-10/GAS-774/780 Installation in Orb. | 09 May '01(A) |
| GAS-774/780 IVT in Orbiter | 14 May '01(A) |
| APCU IVT in Orbiter | 15 May '01(A) |
| HEAT IVT in Orbiter | 18 May '01(A) |

PAD-A

| | |
|---|----------------|
| Launch Package to Pad | 25 Jul '01 (A) |
| Launch Package Transfer to Orbiter | 27 Jul '01 (A) |
| Orbiter to Payload Electrical Mates | 27 Jul '01 (A) |
| Orbiter to Payload IVT | 02 Aug '01 |
| HEAT/SIMPLESAT Clean, Purge & Arming | 03 Aug '01 |
| Payload Closeout/PLBD Closed for Flight | 06 Aug '01 |
| Middeck Payloads Late Stow | 08 Aug '01 |
| Launch | 09 Aug '01 |



ORBITER MIDDECK

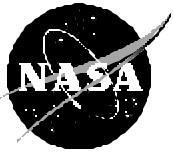
| <u>Experiment</u> | <u>Installation</u> | <u>IVT</u> | <u>Launch Delay/Scrub</u> | <u>Destow</u> |
|-------------------------------|---------------------|------------|---------------------------|---------------------|
| APCF ^a | L-24 Hrs | YES | 48 Hrs | N/A |
| BCSS-4 ^a | L-24 Hrs | NO | 24 Hrs | N/A |
| BTR ^c | L-24 Hrs | YES | 48 Hrs | Nominal |
| CPCG-H ^b | N/A | NO | N/A | Runway |
| DCPCG-V ^a | L-36 Hrs | YES | 48Hrs | N/A |
| DREAMTiME ^a | L-24 Hrs | NO | 4 Days | Runway ^d |
| HRF Torso/DOSMAP ^b | N/A | NO | N/A | Runway |
| PNTD Kit ^b | N/A | NO | N/A | Runway |
| PCG-EGN Dewar ^b | N/A | NO | N/A | Runway |

^a Ascent only, hardware to be transferred to ISS

^b Descent only, hardware to be transferred from ISS

^c BTR powered for ascent but unpowered for descent

^d Film removal only



ENGINEERING STATUS

Technical Requirements

- All technical requirements for ISS-11-7A.1/STS-105 have been baselined except RCNs KU15666 - MPLM Ext/Int Closeout Cont. Rqmnt. and KU15668 – MPLM FDS Beta Cloth Panel Bonding
 - No constraint to launch

Technical Procedures

- All procedures have either been released or are scheduled to be released and will meet the applicable “on the shelf” requirements
 - All remaining open work is scheduled

Problem Reports

- No “Lost and Found” PRs
- All remaining PRs have been worked and are closed or are being closed

Launch Commit Criteria

- None

CoFR Exceptions

- None
-



READINESS STATEMENT

Pending completion of the identified standard open work, planned forward work, and resolution of the identified CoFR Exceptions, ISS/Payload Processing Directorate is ready to proceed with launch of ISS-11-7A.1/STS-105.



ACRONYMS

| | |
|----------------|---|
| APCF | ADVANCED PROTEIN CRYSTALLIZATION FACILITY |
| APCU | ASSEMBLY POWER CONVERTER UNIT |
| BCSS | BIOTECHNOLOGY CELL SCIENCE STOWAGE |
| BTR | BIOTECHNOLOGY REFRIGERATOR |
| CBM | COMMON BERTHING MECHANISM |
| CPCG-H | COMMERCIAL PROTEIN CRYSTAL GROWTH - HIGH DENSITY |
| DCPCG-V | DYNAMICALLY CONTROLLED PROTEIN CRYSTAL GROWTH – V LOCKER |
| EAS | EARLY AMMONIA SERVICER |
| GAS | GET AWAY SPECIAL |
| HEAT | HITCHHIKER EXPERIMENTS ADVANCING TECHNOLOGY |
| ICC | INTEGRATED CARGO CARRIER |
| IVT | INTERFACE VERIFICATION TEST |
| MISSE | MATERIALS INTERNATIONAL SPACE STATION EXPERIMENT |
| PCG-EGN | PROTEIN CRYSTAL GROWTH – ENHANCED GASEOUS NITROGEN |
| PCR | PAYLOAD CHANGEOUT ROOM |
| PNTD | PASSIVE NUCLEAR TRACK DETECTOR |
| SEM | SPACE EXPERIMENT MODULE |